TRANSLATION PATENT COOPERATION TREATY POT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2F04169-PCT				FOR FURTHER ACTION		See Form PCT/IPEA/416				
International application No.				International filing da	te (day/month/year)	Priority date (day/month/year)				
PCT/JP2004/017408			7408	24.11.200	4	03.12.2003				
International Patent Classification (IPC) or national classification and IPC										
H05B6/04 (2006. 01), G03G15/20 (2006. 01), H05B6/14 (2006. 01), H05B6/36 (2006. 01)										
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.										
1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.									
2.	This R	EPORT consi	sts of a total of	6	sheets, including	sheets, including this cover sheet.				
3.	This report is also accompanied by ANNEXES, comprising:									
	a. 🔀	(sent to th	he applicant and	to the International Bu	reau) a total of 2	sheets, as follows:				
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).									
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental									
	Box.									
	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))									
	, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).									
4.	This re			ng to the following item	nsı					
		Box No. I	Basis of the	report						
	H	Box No. II	Priority							
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability									
	Box No. IV Lack of unity of invention									
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement									
	Box No. VI Certain documents cited									
	Box No. VII Certain defects in the international application									
	Box No. VIII Certain observations on the international application									
Date of submission of the demand					Date of completion of the	is report				
Name and mailing address of the IPEA/JP					Authorized officer					
Faccimile No.					Telephone No					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/017408

Box	No. I	I	Basis of the report							
1.			egard to the language, this report is based on the international application in the language in which it was filed, unless otherwise ed under this item.							
		-	report is based on translations from the original language into the following language, a is the language of a translation furnished for the purposes of:							
		int	international search (Rule 12.3 and 23.1(b))							
		U pul	publication of the international application (Rule 12.4)							
		international preliminary examination (Rule 55.2 and/or 55.3)								
2.	recei		rd to the element s of the international application, this report is based on (replacement sheets which have been furnished to the Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to ():							
		the intern	ternational application as originally filed/furnished							
	\boxtimes	the descr	ription:							
		pages	1-21		as originally filed/furnished					
		pages*		received by this Authority on						
		pages*		received by this Authority on						
	\boxtimes	the claim	ns:							
		nos.	2,5-15		as originally filed/furnished					
		nos.*								
		_								
	\square			received by this radiotity on						
		the draw								
		sheets			as originally filed/furnished					
		sheets*								
		sheets*		received by this Authority on						
	\sqsubseteq	a sequen	nence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.							
3.	Ш	The ame	mendments have resulted in the cancellation of:							
		L the	the description, pages							
		L the	the claims, nos.							
		the	the drawings, sheets/figs							
		the	the sequence listing (specify):							
		any	y table(s) related to sequence listing (specify):							
4.			report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).							
		the	e description, pages							
			e claims, nos.							
			the drawings, sheets/figs							
			e sequence listing (specify):							
			any table(s) related to sequence listing (specify):							
*	If ite	m 4 applie	es, some or all of those sheets may be marked "supe	erseded."						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

- 2. Citations and explanations (Rule 70.7)
 - Document 1: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 30619/1989 (Laid-open No. 120797/1990) (Kitashiba Electric Co., Ltd.), 28 September 1990
 - Document 2: JP 2003-17221 A (Ricoh Co., Ltd.), 17 January 2003
 - Document 3: JP 2001-188430 A (Matsushita Electric Industrial Co., Ltd.), 10 July 2001
 - Document 4: JP 8-16006 A (Canon Inc.), 19 January 1996
 - Document 5: JP 2003-91186 A (Fuji Xerox Co., Ltd.), 28

 March 2003

The inventions set forth in claims 1, 6, 7, 10, 12, 14 and 15 do not involve an inventive step in the light of the inventions disclosed in documents 1 and 2 cited in the international search report. Document 2 discloses a heating device for use in an affixing device, said heating device being equipped with: an excitation coil, which has a plurality of conductors wound thereupon; a heat generating member with a rotating member that moves relative to the aforementioned excitation coil, which is heated via electromagnetic induction from the action of

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

the magnetic field that is generated by the aforementioned excitation coil; and a thermostat, which detects when the aforementioned heat generating member reaches an abnormally high temperature. Therein, the conductors of the aforementioned excitation coil are wound parallel the axial direction of the aforementioned rotating member and arranged so as to face the peripheral surface of the aforementioned rotating member, while the aforementioned thermostat is disposed on the same side of the aforementioned heat generating member as the aforementioned excitation coil and is positioned at the center of the windings of the aforementioned excitation coil. Meanwhile, document 1 indicates that the temperature detection means is disposed between the winding bundles of the excitation coil. Such being the case, it would have been easy for a person skilled in the art to configure the inventions set forth in claims 1, 6, 7, 10, 12, 14 and 15 by disposing the thermostat from the invention disclosed in document 2 between the winding bundles of the excitation coil, like in the invention disclosed in document 1. Furthermore, the fact that it is necessary to prevent the temperature detection means of an induction heater from generating heat itself and the fact that it is necessary to decrease the effects of magnetic fluxes are well known.

The invention set forth in claim 2 does not involve an inventive step in the light of the inventions disclosed in documents 1 and 2, and document 3 cited in the international search report. Document 3 discloses a heating device equipped with a center core, which is configured from a ferromagnetic member that is disposed at the center of the windings of the excitation coil, and

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

side cores, which are configured from ferromagnetic members that are disposed on the outsides of the winding bundles of the aforementioned excitation coil. Such being the case, it would have been easy for a person skilled in the art to configure the invention set forth in claim 2 by applying a center core and side cores like those disclosed in document 3 and applying the technical feature disclosed in document 1, wherein the temperature detection means is disposed between the winding bundles of the excitation coil, in the invention disclosed in document 2.

The inventions set forth in claims 3, 4 and 13 do not involve an inventive step in the light of the inventions disclosed in documents 2 and 3, and document 4 cited in the international search report. Document 4 discloses a heating device wherein the means for detecting abnormal temperatures is sandwiched between the core and the excitation coil by means of the side parts of the winding bundles of the excitation coil.

Furthermore, a person skilled in the art could reposition the center core to a location outside the center of the windings of the excitation coil, as appropriate. Such being the case, it would have been easy for a person skilled in the art to configure the inventions set forth in claims 3, 4 and 13 in the light of the inventions disclosed in documents 2 to 4.

The invention set forth in claim 5 does not involve an inventive step in the light of the inventions disclosed in documents 1 and 2, and document 5 cited in the international search report. Document 5 discloses a heating device equipped with an opposed core for forming a magnetic path, which is disposed on the opposite side

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/017408

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

of the heat generating member from the excitation core. Such being the case, it would have been easy for a person skilled in the art to configure the invention set forth in claim 5 in the light of the inventions disclosed in documents 1, 2 and 5.

The inventions set forth in claims 8, 9 and 11 are not disclosed in any of the documents that are cited in the international search report, and would not have been obvious to a person skilled in the art.